## AR8600 OPTIONAL FILTERS

The AR8600 is supplied as standard with four filter bandwidths. These are all Murata filters. Two of these can be replaced with Collins mechanical filters if required.

Standard bandwidths fitted are;

| **Mode** | **Bandwidth** | **Board No.** | **Type** |
|---|---|---|---|
| *USB LSB CW NAM* | *3kHz (-6dB)* | *F109* | *CFX455J* |
| *AM SFM* | *9kHz (-6dB)* | *F108* | *CFUCG455G* |
| *WAM NFM* | *12kHz (-6dB)* | *F107* | *CFUCG455F* |
| *WFM* | *150kHz (-3dB)* | *F110* | *SFEC10.7* |

Filter F109 can be replaced with Collins filter MF2.5.
Filter F108 can be replaced with Collins filter MF6.0.
Note; the 6.0kHz filter is recommended for difficult AM broadcast use but may be too narrow for some communication use – e.g. VHF air band where centre frequencies can be offset by a few KHz.

Fitting of the filters requires the use of a soldering iron and de-soldering braid or a solder sucker for removal of the old filter and re-soldering of the new item.

**Optional filter fitting.**

Disconnect all power

Remove both case halves (16 screws).

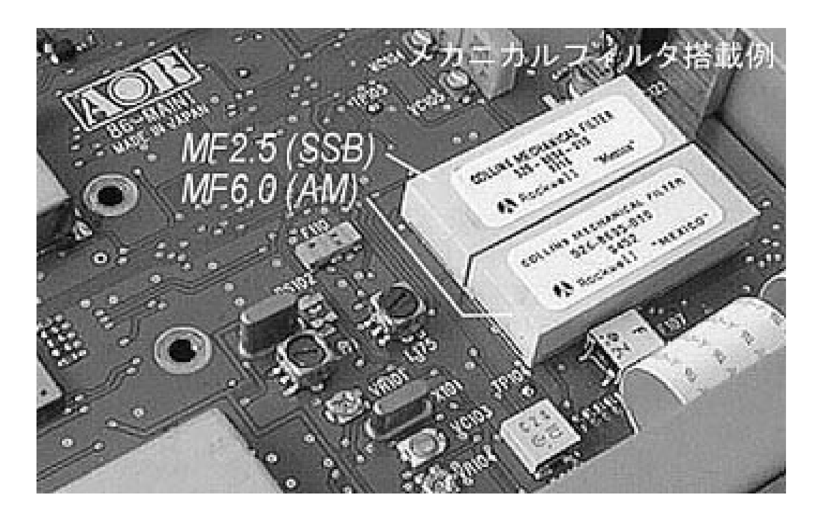
Remove the top inner case (6 screws). Disconnect the speaker connector and optional battery pack plug (if fitted).

Remove the three black headed screws now visible on the main PCB.
Remove the bottom inner case (6 screws).

Locate and de-solder the filter to be replaced.
Note; FL109 had 5 solder connections from the underside of the board.
FL108 has 3 solder connections on the top side of the board.

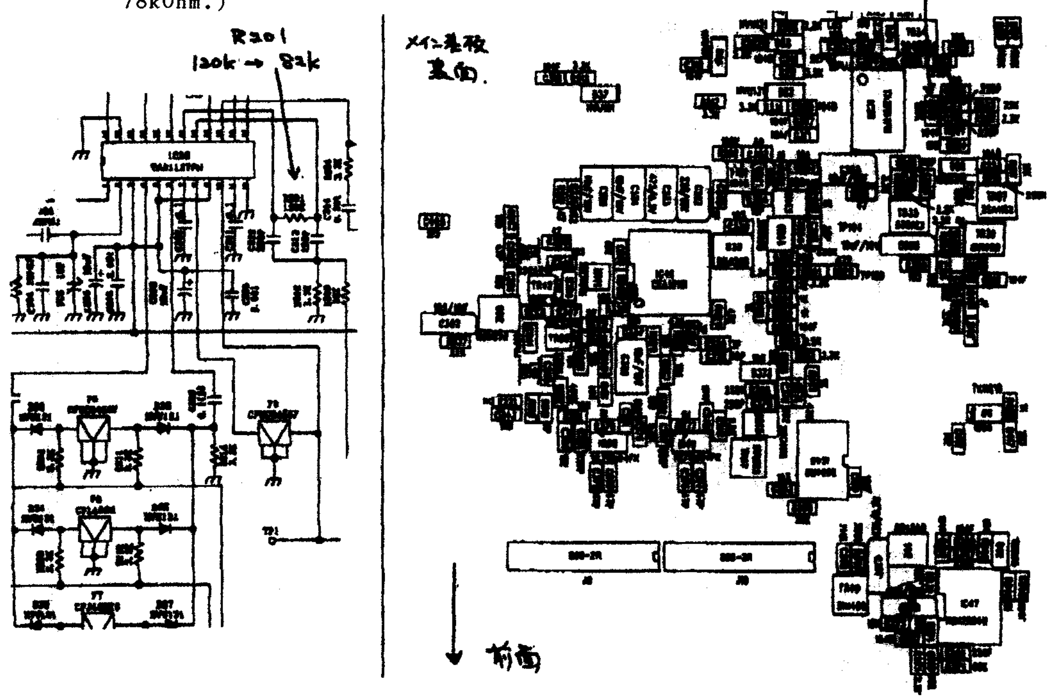
Remove the old filter and fit the new one in its place, soldering all three pins to the underside of the board. No other component changes or links are required.

Re-fit the case parts in the reverse order to the above and test your work.



For the AR8600 Mk2, refer to the following bulletin:

* Value of R201 has to be changed from 120k to 82kOhm when the MF6 is fitted in place of CFL455H. (Alternatively a 220kOhm can be added in parallel over R201 to make a combined 78kOhm.)




This change is required to eliminate the unstable reception in SFM mode caused by different noise characteristics when MF6 is fitted. No such change is required when CFJ455K5 (F7) is replaced with MF2.5.